

# ICT Booklet G5

*Because your kids deserve better education.*



**Name:**  
**Class:**



## Explorer in action

### Introduction

In this lesson student will be able to understand how to share information, how to record them, and will learn all the available ways to exchange information with friends via educational platforms.

### Into the lesson





There are many tools you can use to record your information or even share them with others. Like what did 'Fred Hiebert' do when he writes his reports after discovering earth.

'Fred Hiebert' he is an archaeologist, working at National Geographic organization. He studies the past by prospecting, observation, and writing about the archaeological sites he discovered.

- So, what do you think are the tools 'Fred Hiebert' used?



### Tools

1- Microsoft word		With this application he wrote documents and reports.
2- Microsoft excel		With this application he prepared graphs and express it by making charts.
3- Microsoft PowerPoint		With this application he made a presentation to display his research results to his team by creating slides that offer easy reading and make information clearer.
4- Paper messages and E-mails		This is the formal way to communicate, sometimes he delivers documents personally as paper documents, or send them via e-mail.

- 'Fred Hiebert' played a big role with his friends and students over the world, by guiding, coaching, and sharing his experience with them.
- He preferred to communicate using face-to-face meetings as he thought it's better for delivering information.
- Sometimes he couldn't attend the meetings because of his discovery flights, so he used to schedule the meeting using virtual meeting platforms, such as [Zoom, WhatsApp].
- 'Fred Hiebert' said that it's important to keep contacting, doesn't matter the way you do it, but you must keep in touch using [Face-to-face meetings, Virtual meetings, Phone calls, E-mails, or even sending a document that people will get useful information from it].
- Information sharing is really important nowadays, and technology helped us to make it easier, so we must share our experience with others to make our world a better place.
- **Mentoring:** is advising someone on a subject you have experience in.



### Summary

- 1- **Microsoft word** is used to write documents and reports in paper mode.
- 2- **Microsoft excel** is used to make graphs by express them using charts to make it clear to compare between data, also excel can make mathematic operations.
- 3- **Microsoft PowerPoint** is used to create presentations the display information in a good way using slides that make it easier to read.
- 4- **Paper message** is a personal way to deliver documents face-to-face, and e-mails is a formal way to communicate among work area.
- 5- Keep contact others and share your experience with others to make the world better place.
- 6- If you can do a face-to-face meeting, do it virtually by using [Zoom, WhatsApp, Duo, etc....].
- 7- **Mentoring** is advising or training someone on a subject you have a lot of experience in.

### Vocabulary

Share	مشاركة	Record	تسجيل
Exchange	تبادل	Discover	اكتشاف
Available	متاح	Archaeologist	عالم اثار
Educational	تعليمي	Organization	منظمة
Platform	منصة	Prospecting	تنقيب
Observation	ملاحظة	Archeological sites	المواقع الاثرية
MS-word	برنامج معالجة النصوص	MS-excel	برنامج العمليات والجداول الحسابية
MS-PowerPoint	برنامج العروض التقديمية	Paper document	مستند ورقي
E-mail	البريد الالكتروني	Report	تقرير
Prepared	تحضير	Graph	رسم بياني
Express	تعبير	Chart	خريطة
Presentation	عرض تقديمي	Display	عرض
Research	بحث	Slide	شريحة
Formal	رسمي	Communicate	تواصل
In-person	بصفة شخصية	Clearer	بوضوح
Mathematic operation	عمليات حسابية	Role	دور
Guiding	توجيه	Coaching	تدريب
Experience	خبرة	Flights	رحلات طيران
Schedule	جدول مواعيد	Virtual meeting	مقابلة افتراضية
Face-to-face meeting	مقابلة وجها لوجه	Among	وسط
Mentoring	توجيه	Colleagues	الزملاء



## Revision

Put (✓) to the correct statement and (✗) to the wrong statement:

- |   |         |
|---|---------|
| 1- To make a good presentation the best application is MS-word.               | (     ) |
| 2- With MS-excel you can create tables and charts to explain your results.    | (     ) |
| 3- Paper document is used to be sent on e-mail among work area.               | (     ) |
| 4- Paper document is used to deliver information in person.                   | (     ) |
| 5- Scientists used some applications to publish their research result.        | (     ) |
| 6- Sharing experience with other and guide them helps to make a better world. | (     ) |
| 7- MS-word is a good application to write documents and reports.              | (     ) |
| 8- E-mail is a formal way to communicate or send data among work area.        | (     ) |
| 9- Zoom and WhatsApp applications are used to make a virtual meeting.         | (     ) |
| 10- It's not important to mentor others or share experience with them.        | (     ) |

Complete using words between brackets:

[Word – PowerPoint – Excel – E-mail – Mentoring – Zoom and WhatsApp – Face-to-face]

- 1- ..... considered to be the better way of communication.
- 2- ..... is the best application if you want to create tables or charts to analyze data.
- 3- ..... is advising others on a subject you have a lot of experience in.
- 4- ..... a good application if you want to create documents or reports.
- 5- If you want to make a virtual communication these applications are the best .....
- 6- ..... the better way to create presentations to explain data clearly.

Choose the correct answer:

- |  |  |
|--|--|
| 1- Can be used to write documents and reports.             | (Word – Excel – Zoom – PowerPoint)         |
| 2- Can be used for virtual online meetings.                | (Zoom – TV-show – E-mail – Paper document) |
| 3- To create tables, charts, and do mathematic operations. | (PowerPoint – WhatsApp – Excel – Word)     |
| 4- Make a good research presentation to review results.    | (Excel – E-mail – Word – PowerPoint)       |
| 5- Formal way to send messages among work area.            | (E-mail – Zoom – WhatsApp – Word)          |

Match from column (A) what match with column (B):

1- MS-Word	A- Create a presentation in a good way.
2- MS-PowerPoint	B- Document written on paper to deliver in person.
3- Mentoring	C- Virtual applications for online meetings.
4- MS-Excel	D- Write documents and reports.
5- Paper messaging	E- Is advising others on something you have experience in.
6- Zoom and WhatsApp	F- Make charts and tables to compare between data.



## Computer Accessories

### Introduction







In this lesson student will be able to know the basic concepts of computer accessories, what are the common computer problem that may occur while using the computer, and how to solve them.

### Into the lesson

There are many computer accessories we can use while using the computer.

- In your opinion what are these accessories? Do you know the importance of them?

### Accessories

1- Flash memory		Used to transfer files and data from a computer to another computer.
2- Ethernet port		The connecting point between router and computer by using ethernet cable for more stability than using Wi-Fi.
3- Router		The device that connects computer to internet using ethernet cable or Wi-Fi.
4- Ethernet cable		The wire cable that creates connection between router and computer to gain access to the internet.
5- External H.D.D [hard disk drive]		Like CDs and flash memory as external storage, but faster and better performance.
6- HDMI [High-definition multimedia interface]		The wire cable the transfer images and audio from and to devices.

### Measurement units

Measurement for storage.		Measurement for internet speed.	Measurement for CPU performance.
1- Bit	The smallest measurement unit.	1- Mbps [Megabit per second]	1- GHz [Gigahertz]
2- Byte	= 8 Bits		
3- Kilobyte	= 1024 Bytes		
4- Megabyte	= 1024 Kilobytes		
5- Gigabyte	= 1024 Megabytes		
6- Terabyte	= 1024 Gigabytes		

Let's go deeper in next page

- **Storage measurement:**

1- Bit: the smallest measurement unit, also used for internet speed.

2- Byte: = 8 Bits, that means one letter [X], so each letter equals 8 bits.

3- Kilobyte = 1024 Bytes.

4- Megabyte = 1024 Kilobytes.

5- Gigabyte = 1024 Megabytes.

6- Terabyte = 1024 Gigabytes.

- Side note: ofc. There are many measurement units for storage such as [Petabyte, Exabyte, Zettabyte, Yottabyte, Brontobyte, Geopbyte], each measurement equals 1024 units from which is before.

- **Internet speed measurement:**

Mbps [Megabit per second] means the transferred data per second between router and computer on the network, so it measures the speed of connection [Wi-Fi or ethernet cable].

- When the internet speed became higher, it will be better performance in network connection.

- **CPU measurement:**

GHz [Gigahertz] it measures the cycles that CPU process per second, and it's like the internet connection.

More cycles to process mean better performance on data processing and converting it to information.

### Problems that face user while using computer, and solutions

Problem	Potential reason	Potential solution
1- Error while data processing or opening large files.	Not enough ram memory to open the files, or read data inside the files.	Close some applications to save some memory.
2- Can't store files.	Not enough storage inside the disk.	Transfer old data to external hard drive or CDs or flash memory.
3- Poor connection while using video call conference.	Wi-Fi connection is slow and weak.	Try to use ethernet cable for better performance.
4- Home internet doesn't work.	Connection lost or disconnected.	Check if router is on, DSL and Internet led is up, check the ethernet cable, or call your ISP [Internet service provider].



### Summary

- 1- You can save data on storage units, such as [USB flash memory, or CDs, or external H.D.D [hard disk drive]].
- 2- **HDMI** [High-definition multimedia interface] is a cable used to transfer images and audio between devices.
- 3- **Router** is the main device that provide internet to computer, by using ethernet cable and connect it to ethernet port.
- 4- **Ethernet port** is the place that you put the ethernet cable inside it to gain internet access from the router.
- 5- **Ethernet cable** is the cable used to connect computer to the router via ethernet port.
- 6- There are three measurement units [Storage, Internet speed, CPU performance speed].
- 7- **Bit** is the smallest measurement unit.
- 8- **Byte** contain 8 Bits and it represent one letter.
- 9- The rest measurement units equal 1024 from each measurement that came after it.
- 10- The internet speed can be measures by megabit, and this means the amount of transferred data per second, and ofc. when the number is high that means better connection speed.
- 11- The wired connection via ethernet cable is more stability than Wi-Fi connection.
- 12- Higher GHz [Gigahertz] means that processor will do more cycles, and that means better performance.

### Vocabulary

Accessories	ملحقات	Basic concepts	المفاهيم الاساسية
Common	شائع	Occur	تحدث
Solve	حل	Importance	اهمية
Flash memory	ذاكرة الفلاش	Transfer	نقل
Store	تخزين	Storage	مخزن
Ethernet port	منفذ كابل الايثرنت	Connection	اتصال
Stability	مستقر	Wi-Fi	الشبكة اللاسلكية
Router	الراوتر	Device	جهاز
Ethernet cable	كابل الايثرنت	Wire	سلكي
Gain	يحصل	Access	الوصول
External	خارجي	[H.D.D] Hard disk drive	هارد القرص الصلب
HDMI [High-definition multimedia interface]	واجهة الوسائط المتعددة عالية الوضوح	Multimedia	الوسائط المتعددة

Interface	واجهة	Performance	اداء
Measurement	قياس	Unit	وحدة
Internet speed	سرعة الانترنت	CPU [Central processing unit]	وحدة المعالجة المركزية
Deeper	عمق	Smallest	الاصغر
Largest	أكبر	Error	خطأ
RAM [Random access memory]	ذاكرة الوصول العشوائي	Memory	ذاكرة
Potential	محتمل	Poor	فقير – ضعيف
Weak	ضعيف	Conference	اجتماع
Disconnected	غير متصل	Connected	متصل
Is-up	قائم – يعمل	Led	لمبة
Is-down	معطل – لا يعمل	ISP [Internet service provider]	مزود خدمة الانترنت



## Revision

Put (✓) to the correct statement and (✗) to the wrong statement:

- 1- Ethernet cable is a device that connect computer to the internet. ( )
- 2- Flash memory is used to transfer files from computer to another computer. ( )
- 3- Router is a device that responsible to connect computer to the internet. ( )
- 4- HDMI is a cable used for audio and video with high quality. ( )
- 5- Bit is the smallest measurement unit. ( )
- 6- Byte is a measurement unit equal 6 bits. ( )
- 7- Terabyte is the biggest measurement unit known these days. ( )
- 8- Mbps is a measurement unit for internet speed. ( )
- 9- If you can't open a file, that means you don't have enough storage space. ( )
- 10- Ethernet cable connection is slower than Wi-Fi connection. ( )

Complete using words between brackets:

[Ethernet port – Gigahertz – Mbps – Ethernet cable - Bit]

- 1- ..... the wire cable that creates connection between router and computer to gain access to the internet, more stable than Wi-Fi.
- 2- ..... a measurement unit to measure CPU performance.
- 3- ..... a measurement unit to measure internet speed connection.
- 4- ..... is the smallest measurement unit for measuring storage space.
- 5- ..... is the connection point between router and computer by using ethernet cable for more stability than using Wi-Fi.

Choose the correct answer:

- 1- Can be used to transfer data and files between computers. (Router – HDMI – Flash memory – Ethernet port)
- 2- The main device to gain internet. (Ethernet cable – Ethernet port – Router – H.D.D)
- 3- The smallest measurement unit. (GHz – Bit – Mbps – Byte)
- 4- Byte is a measurement unit that equal .... bits. (6 – 8 – 7 – 9)
- 5- Like CDs and Flash memory, but faster and better performance. (Router – Byte – H.D.D – HDMI)

Match from column (A) what match with column (B):

1- Ethernet port	A- The device that responsible for connecting computer to the internet using ethernet cable or Wi-Fi.
2- HDMI [High-definition multimedia interface]	B- Wire cable that creates connection between router and computer to access the internet, more stable than Wi-Fi.
3- Router	C- The connection point between router and computer using ethernet cable.
4- GHz [Gigahertz]	D- The largest measurement unit.
5- Ethernet cable	E- The measurement unit for measuring CPU performance.
6- Bit	F- The measurement unit used for measuring internet speed.
7- Terabyte	G- Wire cable is used to transfer images and audio from and to devices.
8- Mbps	H- The smallest measurement unit.



## Networks

### Introduction

In this lesson student will be able to know what is the network, what are the different types of networks, and explain the evolution of connection between computers and connection devices from 80<sup>th</sup> century to present.

### Into the lesson

- In your opinion what is network?
- Network: a group of people or things connected to each other for specific purpose, so for example computer network is a connection between computer devices for exchanging important data and information.



You can have your own private home network, such as [Printer connected to computer], using LAN [Local area network].

- Side note: there are two types or connections [LAN and WAN], LAN [Local area network] is for small area connection, WAN [Wide area network] for world connection.

- In your opinion what is internet?
- Internet: a network that connect computer devices and people who uses this network to the world.



- In your opinion what do we need to connect a computer to internet?
- Gateway: the direction device such as [Router] that connect computer with ISP [Internet service provider] such as WE.



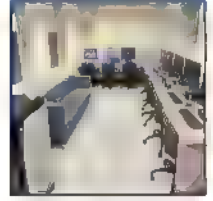
- In your opinion what is the WWW [World wide web]?
- WWW [World wide web]: is a part of network that consisting of webpages that possible for people to move between them, such as EKB [Egyptian knowledge bank] a free source available on internet.





- In your opinion what is the intranet?

- Intranet: a network that limited to small amount of people connected together via this network, such as [School, Office].



- In your opinion what is the close network?

- Close network: a network that limited to one room, such as [Computer lab] inside the school, for data sharing connected via ethernet cables.



### Summary

- 1- **Network** is a group of people or things connected for specific purpose to exchange data and information.
- 2- **LAN** [Local area network] connection is a small group connected together such as school or organization, but at same building.
- 3- **WAN** [Wide area network] connection is a large group connected together via internet such as different school branches or organizations.
- 4- **Router** is the main device that connect computer to network via ethernet cable or Wi-Fi connection.
- 5- **Internet** is the method that connect people with each other around the whole world.
- 6- **Intranet** limited connection for small group such as a school.
- 7- **Close network** is limited connection for small group such as computer lap inside the school.
- 8- Close network is like [LAN], while open network is like [WAN].
- 9- **WWW** [World wide web] is a part of network that consist of webpages.

### Vocabulary

Network	شبكة	Century	قرن
Specific	محدد	Purpose	غرض
Private	خاص	LAN [Local area network]	شبكة نطاق محلي
WAN [Wide area network]	شبكة نطاق واسع	Internet	الانترنت
Gateway	بوابة	WWW [world wide web]	الشبكة العنكبوتية العالمية
Consist of	يتكون من	Webpages	صفحات الويب
Free source	مصدر متاح	Intranet	الانترانت
Limited	محدد	Unlimited	غير محدود

**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- Computer network is a private closed network. ( )
- 2- Gateway is a method to access something needed to be achieved. ( )
- 3- Closed network contains computers connected by ethernet cable. ( )
- 4- Ethernet cable is a type of LAN connection. ( )
- 5- Intranet is a private network that connect computers together in a small area. ( )
- 6- Internet is a private network that connect computers together in a small area. ( )
- 7- Intranet is a private network that connect computers together in a wide area. ( )
- 8- Internet is a private network that connect computers together in a wide area. ( )
- 9- Router is the device that give the gateway from ISP to access the internet. ( )
- 10- WWW contain webpages with elements, allows you to move between them. ( )

**Complete using words between brackets:****[Internet – Intranet – Gateway – Network – World wide web]**

- 1- ..... is a part of network that consists of webpages and user can move between them.
- 2- ..... the direction device that connect computer with ISP.
- 3- ..... is a group of people connected together for data exchange.
- 4- ..... is a network that connect computer devices and people who uses this network to the world.
- 5- ..... is a network that limited to small amount of people connected together via this network.

**Choose the correct answer:**

- 1- Large group of people connected together from different countries via internet. (WAN – LAN – Internet – World wide web)
- 2- Small group of people connected together via one network system. (Internet – LAN – Intranet – Network)
- 3- The direction device that connects computer with ISP. (Network – Internet – Gateway – Intranet)
- 4- Consist of webpages while user can move between them. (LAN – WAN – WWW – Internet)
- 5- Connect computer devices and people together by using network. (Intranet – Internet – WAN – Network)

**Match from column (A) what match with column (B):**

1- Network	A- Like LAN and intranet, is a network for small amount of people connected together in a same room.
2- Intranet	B- A limited network with small amount of people connected together via network server such as school.
3- Gateway	C- Group of people or things connected to each other for specific purpose or exchange information.
4- Close network	D- A part of network that consists of webpages.
5- LAN [Local area network]	E- Connection of small area that connect small group together.
6- Internet	F- The direction that connects computer with ISP.
7- WWW [World wide web]	G- A network that connects computer devices to the world.
8- WAN [Wide area network]	H- Connection that can connect people to the world.



## Digital communication tools


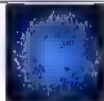
### Introduction

In this lesson student will get information about different ways to use computer networks, describe the scientific concepts related to ICT tools, and understand computer networks.

### Into the lesson

- We use network daily in our life, such as [Sending text messages, taking online lessons, and download files].

### Types of networks

<b>Closed network</b>		<b>Open network</b>	
LAN [Local area network] connection		WAN [Wide area network] connection	

- Everything we are using in our homes could be called IOT [Internet of things].
- In your opinion what is the IOT [Internet of things]?
- **IOT [Internet of things]:** devices connected to each other via internet, and could be controlled either if they are in the same room, or another city.
- In your opinion what is the Bluetooth?
- **Bluetooth:** a technology that connect devices in a short-range area as wireless for data transferring.
- **Bluetooth speakers:** a device used to listen to music, it connects to computer via Bluetooth [wireless] method.

### Networks and people of determination

- It can help people who suffer bad hearing to use Bluetooth speakers, for listening to music.
- They can use the network security as creating password for them [Digital privacy].
- Screen reader help people who suffer from bad sight to do their tasks.
- Audio feedback help people who suffer bad hearing or blind people to read.



- In your opinion how can screen reader help people of determination?
- They can write their research, or even read downloaded document inside personal device.
- In your opinion how can braille method help people of determination?
- It makes reading easier for blind people.
- In your opinion how can digital marketing help people of determination?
- It makes buying or selling is easier for them.

### Summary

- 1- **Close network** is like LAN [Local area network], and can be used in small place like office room.
- 2- **Open network** is like WAN [Wide area network], is used to connect to the world.
- 3- **IOT** are devices connected together via internet, and could be controlled whether if they are in same room or different cities.
- 4- **Bluetooth** is a connection between devices wireless.
- 5- **Screen reader** is a technology to help people who suffer bad sight, if you remember in last year [Zoom screen software].
- 6- **Braille method** is a way to help blind people to read by touching prominent symbols.

### Vocabulary

Describe	يصف	Scientific	علمي
Related	له علاقة بـ	IOT [Internet of things]	انترنت الأشياء
Controlled	يتحكم بها	Short-range	مسافة قصيرة
Wireless	بدون سلك	Screen reader	قارئ الشاشة
Braille method	طريقة برايل	Sight	نظر
Bad hearing	سمع ضعيف	Blind	أعمى



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- |   |         |
|---|---------|
| 1- Tools we are using at home considered as IOT.                            | (     ) |
| 2- Bluetooth is a digital marketing method.                                 | (     ) |
| 3- Digital marketing doesn't mean buying or selling things on the internet. | (     ) |
| 4- Method of using network is sending text messages.                        | (     ) |
| 5- You can't use network to send text messages to others.                   | (     ) |
| 6- Digital marketing help people to sell or buy things easy.                | (     ) |
| 7- Screen reader help people of determination to read text with voice.      | (     ) |
| 8- Screen reader help blind people to understand text.                      | (     ) |

**Complete using words between brackets:**

[Bluetooth – Screen reader – Close network – Open network – IOT]

- ..... is like LAN [Local area network], and can be used in small place like office room.
- ..... is a connection between devices wireless.
- ..... is like WAN [Wide area network], is used to connect to the world.
- ..... is a technology to help people who suffer bad sight, if you remember in last year.
- ..... are devices connected together via internet, and could be controlled whether if they are in same room or different cities.

**Choose the correct answer:**

- Is used to connect to the world. (WAN – LAN – Intranet – World wide web)
- like LAN [Local area network], and can be used in small place like office room. (Internet – Close network – Open network – Network)
- Is a connection between devices wireless. (Network – Internet – Bluetooth – Intranet)
- Is a technology to help people who suffer bad sight. (IOT – Bluetooth – LAN – Screen reader)
- Devices connected together via internet, and could be controlled via internet. (Bluetooth – Internet – IOT – Screen reader)

**Match from column (A) what match with column (B):**

1- Bluetooth	A- Like LAN and intranet, is a network for small amount of people connected together in a same room.
2- IOT	B- is a technology to help people who suffer bad sight, if you remember in last year [Zoom screen software].
3- Braille method	C- is like WAN [Wide area network], is used to connect to the world.
4- Close network	D- are devices connected together via internet, and could be controlled whether if they are in same room or different cities.
5- Open network	E- is a way to help blind people to read by touching prominent symbols.
6- Screen reader	F- is a connection between devices wireless.



## Common problems for network connection and how to solve them

### Introduction

In this lesson student will get information about the common problems we may face while using network and the possible solutions to fix these problems.

### Into the lesson

- We use network daily in our life, so we may face problems while using programs or video conference, so let's see the steps to solve any problem to gain the ability or problem-solving skills.

### Troubleshooting

**Troubleshooting:** Steps sorted logically to help solve problems.

- **Problem-Solving [troubleshooting]:**
  - 1- Identify the problem: is the problem in computer components or the software? Did you make any mistake?
  - 2- Think differently: think on all possible ways you can follow to solve the problem and plan for it.
  - 3- Study all possible solutions: try to figure all solutions and try them one-by-one till one of them being succeed, or reach last solution without solving the problem.
  - 4- Did any solution work? If not – what did you learn?
  - 5- Ask your teacher or family member for assist.

### Common computer problems and potential solutions

1- Computer device is slow while opening an application.

- **Solutions:**
  - 1- Restart the computer.
  - 2- Check application last updates.
  - 3- Remove some useless applications.

Side note: sometimes this slow could be caused by cache temps or memory overload, so clear cache or disable some startup applications that run-in background process.

2- Slow browser search engine.

- **Solutions:**
  - 1- Check the connection [Wi-Fi or Ethernet cable].
  - 2- Check browser last update.

Side note: sometimes this could be caused by browser cache too, clear them.





## 3- No internet connection.



- Solutions:**

- 1- Use software that detect internet connection.
- 2- Make sure that router is connected to your device via ethernet cable.
- 3- Restart your router.
- 4- Try ethernet cable if you use Wi-Fi.
- 5- Call your ISP and ask for help.

## 4- Slow downloading.

- Solutions:**

- 1- Restart the computer.
- 2- Restart the router and check internet speed.

Side note: sometimes if your device contains malware virus this case slow internet speed.

### Summary

- 1- To solve any problem you need to identify it first, then think on steps to fix it.
- 2- try to think out of the box to figure more solutions for your problem.
- 3- If your solutions didn't work, you must have learnt something.
- 4- Restarting your computer can fix most of computer problems.
- 5- Restarting router device can fix most of internet problems.
- 6- Always use ethernet cable for better internet connection.
- 7- Remove useless software that may cause computer overload.

### Vocabulary

Overload	تحميل زائد	Troubleshooting	خطوات حل المشكلة
Problem	مشكلة	Update	تحديث

**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- |  |         |
|--|---------|
| 1- There is nothing called as problem-solving.                           | (     ) |
| 2- Application updates doesn't matter and don't affect the program.      | (     ) |
| 3- Restarting the computer solve most of the problems.                   | (     ) |
| 4- Restarting the router solve most of internet problems.                | (     ) |
| 5- Slow downloading could be fixed when we remove the search engine.     | (     ) |
| 6- Keeping browser last updated will help us to avoid internet problems. | (     ) |

**Complete using words between brackets:****[Troubleshooting – Overload – Identifying the problem]**

- ..... are steps sorted logically to help solve problems.
- ..... is the problem in computer components or the software? Did you make any mistake?
- ..... means you have useless programs or data cause slow response on your computer device.

**Choose the correct answer:**

- Steps sorted logically to solve problems. (Overload – Troubleshooting – Update – Problem)
- Program is not working. (Restart the computer – Close and reopen the application – Uninstall the program – Try another application)
- No internet connection. (Restart the computer – Restart the router – Check ethernet cable – all of them)
- Slow downloading. (Remove the search engine – Check search engine last updates – Refresh the page – Shutdown the computer)

**Match from column (A) what match with column (B):**

1- Computer is slow	A- Check the Wi-Fi connection and make sure the browser is updates.
2- Search engine is slow	B- Try ethernet cable or restart the router.
3- No internet connection	C- Restart the computer and the router then check the internet speed or call your ISP.
4- Downloading is slow	D- Restart the computer and check applications last updates, and remove useless programs.





## Digital files management

### Introduction

In this lesson student will know about the different computer accessories, know about folders and files management and how to organize the information.

### Into the lesson

- Today information is available everywhere, so how can we store and save them?

1- Flash memory		2- QR code		3- Scanner		4- H.D.D	
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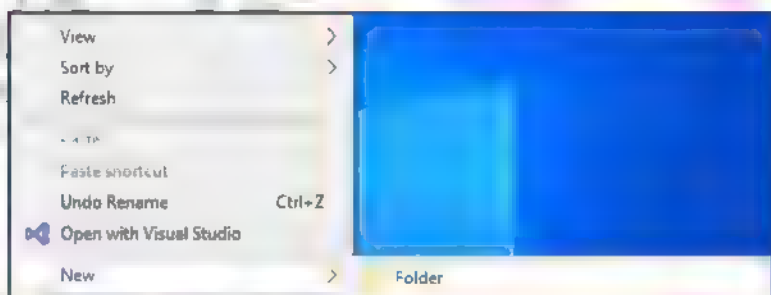
**QR code:** is an encrypted code create in image format to be scanned by mobile camera and redirect us to the object stored inside the code.

**QR Code:** two-dimensional version of the barcode, typically made up of black and white pixel patterns

### Files management

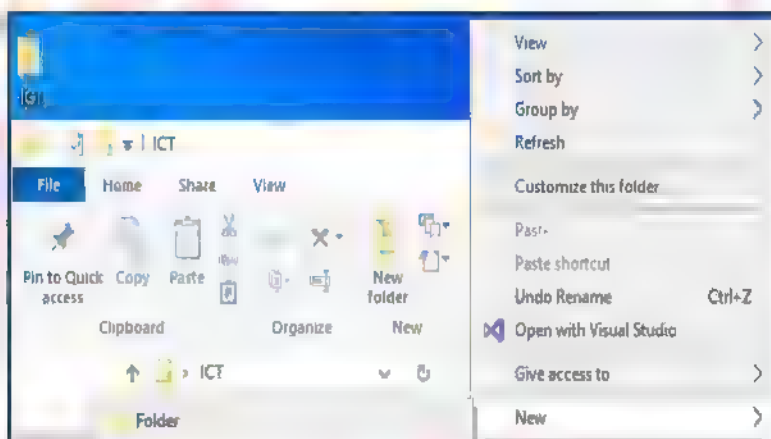
- **Create primary folder**

- 1- Right click on mouse anywhere on screen at the place you want to put the folder.
- 2- Choose from the drop lost menu 'New'.
- 3- Choose the order 'Folder'.

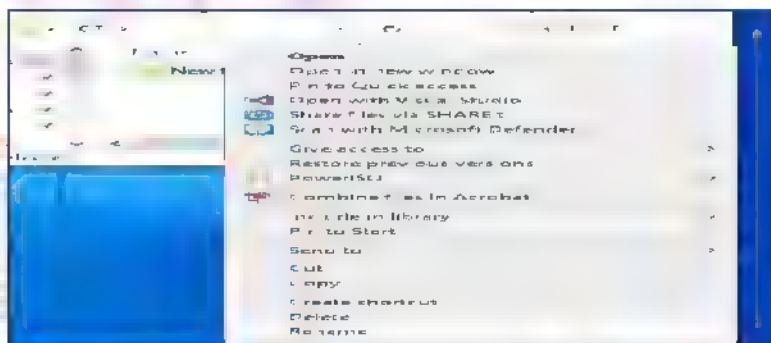


- **Adding sub-folder**

- 1- Go inside the created folder by pressing 'double left click - using the mouse' on the folder.
- 2- After being inside the folder, Right click on mouse anywhere inside the folder.
- 3- Choose from the drop lost menu 'New'.
- 4- Choose the order 'Folder'.
- 5- New sub-folder will appear inside the folder.



- **Put title for each folder or file**
  - 1- Right click using mouse on the folder or file icon.
  - 2- Choose the order 'rename'.
  - 3- Type the new name, press 'enter'.



- Preferred to put suitable name for each folder, for example 'music' for music folder, 'picture' for picture folder, etc....

### Summary

- 1- We can store data using flash memory or H.D.D.
- 2- QR-Code is a good way to save our secrets.
- 3- Better to organize everything inside computer and create folders for each type of items.

Side notes: Critical thinking-

- 1- To delete folder or file you can right click and choose 'delete order'.
- 2- To change the name of folder or file you can right click and choose 'rename'.
- 3- To create new folder, right click anywhere and choose 'new' then 'folder'.

### Vocabulary

Primary	أساسي	Sub-Folder	مجلد فرعي
Icon	رمز	Suitable	مناسب
Organize	تنظيم	Rename	اعادة تسمية
QR-Code [Quick respond] code	رمز الاستجابة السريعة	Management	إدارة



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- |  |          |
|--|----------|
| 1- You can't change the folder name once you've created it.                | (      ) |
| 2- You can't change the file name once you've created it.                  | (      ) |
| 3- To create a folder, you choose delete from the drop list menu.          | (      ) |
| 4- To create a folder, choose new from the drop list menu.                 | (      ) |
| 5- Organizing folders doesn't help at all to find files easy.              | (      ) |
| 6- To delete a folder or file choose delete order from the drop list menu. | (      ) |

**Complete using words between brackets:**

[QR code – New – Rename - Delete]

- Choose ..... from the list if you want to change the name of folder.
- Choose ..... from the list if you want to add a folder.
- ..... two-dimensional version of the barcode, typically made up of black and white pixel patterns.
- Choose ..... from the list if you want to remove a folder.

**Choose the correct answer:**

- |  |                                  |
|--|----------------------------------|
| 1- To change the name of folder, choose ... from the list. | (Rename – Delete – Update – New) |
| 2- To create a folder, choose ... from the list.           | (Delete – Copy – Rename – New)   |
| 3- To remove file from computer, choose ... from the list. | (Rename – New – Delete – Create) |

**Match from column (A) what match with column (B):**

1- Create new folder	A- Right click on the required folder and choose 'delete' order from the drop-down list menu.
2- Delete a folder	B- Right click anywhere and from drop down list menu choose 'new' order then 'folder'.
3- QR code	C- Right click on the required folder and choose 'rename' order from the drop-down list menu.
4- Change folder title	D- Two-dimensional version of the barcode, typically made up of black and white pixel patterns.



## Information search strategies

### Introduction

In this lesson student will learn how to make good plans to access the information, also will know the importance of using keywords.

### Into the lesson

- It's important before searching for any information, to plan and analyze the information that you may find and verify it.
  - Internet contains many information.
  - You must verify the information you need to get.
  - Give feedback, select, and organize information you find while doing your search on the internet.
  - It's important to share and cooperate with your friends while gaining knowledge.
- **Suggested steps to consider when you decide to do a search on the internet**
    - 1- Choose your search topic.
    - 2- Take a part your topic to small sub-topics.
  - For example: you need to collect information about a tomb!
    - A- ask yourself which tools to use for data collecting.
    - B- what are the tools you will use to store your results.
  - 3- Share the information with your friends to get the information you missed.
  - 4- Put a section for each friend to search about.
  - 5- Determine a keyword for the topics, because it's better than using full statement.
  - 6- Share your results, how to select information, and how to organize and margin it for preparing a presentation.

### Summary

- 1- Plan before searching for the information.
- 2- Internet contains huge amount of information.
- 3- Put a specific topic title to search about and choose suitable keywords.
- 4- If you need to gather so much information, it's better to take apart your topic to small sub-topics.
- 5- Share information with friends to complete each other.
- 6- Use PowerPoint to create presentation to display your research results.

### Vocabulary

Plan	تخطيط	Topic	موضوع
Take apart	تقسيم	Gather	جمع
Keyword	كلمة مفتاحية	Suggested steps	خطوات مقترحة





**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- |  |         |
|--|---------|
| 1- It's important to take apart topics into small topics.                | (     ) |
| 2- It doesn't matter to take apart topics into small topics.             | (     ) |
| 3- Choose suitable keywords instead of using full statements.            | (     ) |
| 4- Keywords are useless to use while searching for information.          | (     ) |
| 5- Share you results after analyzing the information using presentation. | (     ) |
| 6- Before starting any research create a plan first.                     | (     ) |
| 7- Internet contains huge amount of information.                         | (     ) |
| 8- All information on the internet is correct.                           | (     ) |

**Complete using words between brackets:****[Keyword – Plan]**

- It's better to use ..... instead of using full statements.
- You must create ..... before starting any search.

**Choose the correct answer:**

- |   |  |
|---|--|
| 1- The first step for searching on the internet.            | (Keyword – Planning – Choose topic – Topic)  |
| 2- To make it easy for search we must use.                  | (Keyword – Planning – Choose topic – Topic)  |
| 3- ..... contains huge amount of information.               | (Topic – Internet – Computer – Mobile)       |
| 4- The last step for research is creating a .....           | (Presentation – Word – Plan – Keyword)       |
| 5- You must cooperate with friends while ..... information) | (Choose topic – Sub-topic – Planning – find) |

**Match from column (A) what match with column (B):**

1- Planning	A- Words being used to search for information.
2- Presentation	B- The first step for information before doing a search.
3- Primary information	C- Means make topic in small parts to make it easy for information to be gathered.
4- Keywords	D- The last step for information to be displayed.
5- Taking apart topics	E- The important information and first information to gather before analyzing

## Sharing information

### Introduction

In this lesson student will learn when to publish the information inside internal network or on the internet, and how to share information using data tables created by MS-excel.

### Into the lesson

- Suggested steps to consider when you decide to share information**

1- **Use scheme or tables:** Create a scheme or table to share information.

2- **Communicate using ICT tools:** while thinking on sharing information on the internet, you must think what to share internal and what to share widely.

**Internal sharing:** Intranet is used to share information through closed network and it's more secure.

- Intranet is like LAN connection.

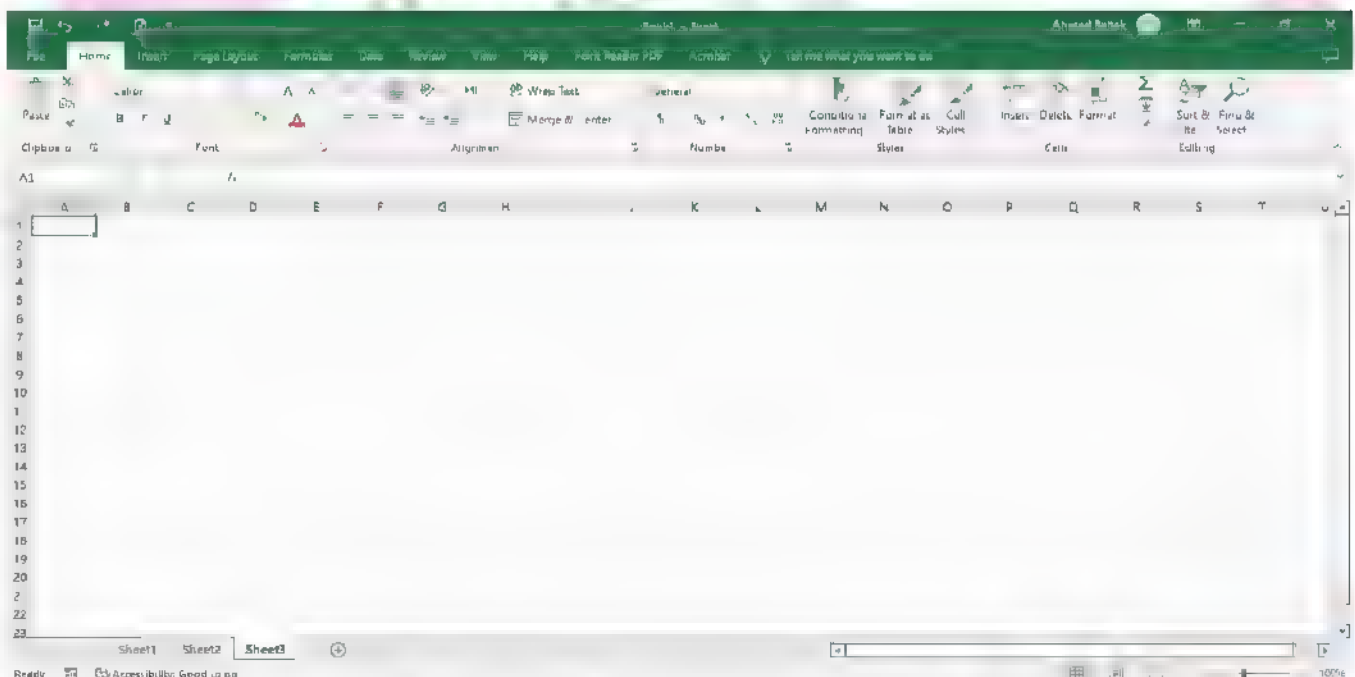


**Internet Sharing:** Internet is used to share information through WWW and it's less secure.

- Intranet is more secure than internet.
- While using internet you must be aware of hackers.



### Microsoft Excel

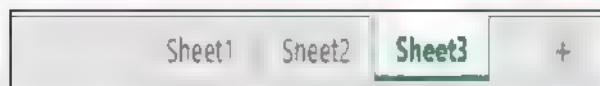




Microsoft Excel: Program created by Microsoft and it's about worksheets, default name for the book is 'Book1', also you can save or rename it.



- Each workbook contains 3 default worksheets and you can add more sheets using the '+' sign.



- Sheet is made of [Columns] and [Rows], and the intersection result between them is called [Cells].



**Column title:** each column has title is a letter of alphabet appears above each column.

**Row title:** each row has title is a number appears on the left side of row.

**Cell title:** each cell has title, made from the intersection result as the [column name] and [row number].

- Cell can contain [text, number, equation].
- Excel contain many formulas and functions that help doing mathematical operations.
- Excel can do data graphing using many styles.
- **Sorting information alphabetically**
  - 1- From the 'Toolbar' choose tab 'Data'.
  - 2- From 'Sort & Filter' section choose 'Sort'.
- Side note: with excel you can do mathematic operation such as [sum – subtract – multiply - divide].
- **Creating a simple formula**
  - 1- Click on the cell you want to apply the formula inside.
  - 2- Write [=] inside that cell, so excel will know you're going to start a formula.
  - 3- Determine all cells you want to include using letters for columns and numbers for rows.

Formula example: (= A1 + B1 + C1), this formula will calculate for 'row 1', and ' 3 columns [A, B, C].

Formula example: (= A1 + A2 + A3), this formula will calculate for 'column A', and ' 3 rows [1, 2, 3].

## Summary

- 1- Default name for the book is 'Book1'.
- 2- Each workbook contains 3 default worksheets.
- 3- Sheet is made of [Columns] and [Rows].
- 4- Cell is the intersection result between [Columns] and [Rows].

- 5- **Column title** each column has title is a letter of alphabet appears above each column.
- 6- **Row title** each row has title is a number appears on the left side of row.
- 7- **Cell title** each cell has title, made from the intersection result as the [column name] and [row number].
- 8- Cell can contain [text, number, equation].
- 9- Excel contain many formulas and functions that help doing mathematical operations.
- 10- Writing [=] inside a cell, so excel will know you're going to start a formula.

### Vocabulary

Consider	يعتبر	Decide	يقرر
Publish	نشر	Scheme	مخطط
Table	جدول	Secure	آمن
Unsecure	غير آمن	Workbook	دفتر أعمال
Worksheet	صفحة اعمال	Columns	عمود
Row	صف	Cell	خلية
Intersection	تقاطع	Sort	ترتيب
Alphabetically	أبجديا	Section	جزء - مقطع
Toolbar	شريط الأدوات	Tab	تبويب
Mathematic operation	عملية رياضية	Formula	صيغة
Function	دالة	Equation	معادلة





**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- To start a formula, you need to type (x) inside the cell. ( )
- 2- To start a formula, you need to type (=) inside the cell. ( )
- 3- Excel is used to deal with mathematic operations. ( )
- 4- Excel is used to create presentations to display information for people. ( )
- 5- PowerPoint contain formulas and functions that help do mathematical operations. ( )
- 6- Worksheet contain one column and one row. ( )
- 7- Cell is a result of intersection between columns and rows. ( )
- 8- Excel can do data graph with many styles. ( )
- 9- Intranet is less secure than internet. ( )
- 10- Intranet is like LAN connection and more secure. ( )
- 11- Internet is less secure than intranet. ( )

**Complete using words between brackets:**

[Internet – Intranet – Sheet – Column title – Row title – Cell – Formula - Sorting]

- 1- ..... is a title that is a number at the left side.
- 2- ..... is a title that is a letter above it.
- 3- ..... is used to share information using WWW and less secure.
- 4- ..... is the page you can work inside excel file and create data.
- 5- ..... is an intersection result between column and row.
- 6- ..... start with (=) and this refer to a mathematical operation.
- 7- ..... is used to share information among small area and more secure.
- 8- ..... is a method used to rank items inside sheet.

**Choose the correct answer:**

- 1- Intersection result between column and row. (Cell – Internet – Sheet – Book)
- 2- Method used to rank items inside sheet. (Cell – Sort – Sheet – Formula)
- 3- Share information among small area and more secure. (Cell – Internet – Intranet – Equation)
- 4- Share information WWW, but it's less secure. (Cell – Internet – Intranet – Equation)

**Match from column (A) what match with column (B):**

1- Cell	A- each row has title is a number appears on the left side of row.
2- Intranet	B- Internet is used to share information through WWW and it's less secure.
3- Column title	C- Intersection result between column and row.
4- Row title	D- Each column has title is a letter of alphabet appears above each column.
5- Internet	E- Program created by Microsoft and it's about worksheets.
6- MS-Excel	F- used to share information through closed network and it's more secure.

## Explorer in Action

### Introduction

In this lesson student will learn the importance of copyright protection and how to make a photography expedition, what are the possible technological problems and how to solve them.

### Into the lesson

'Jeff Kerby' he is an ecologist and a photographer, worked on exciting photography expeditions.

**Exciting expeditions:** trips to places where one takes photography of areas like [landscapes – animals].

Ofc. Jeff Kerby uses many tools on his trips so let's see how Mr. Kerby prepare for his trips.



### Tools

1- Camera	2- Camera lenses	3- Camera batteries	4- Laptop	5- Hard drives	6- Drones	7- Phone with GPS mapping tool
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- Mr. Kerby considers exactly where he is going and what will he do there, also how he will carry out his work securely.
- At the end of each day Mr. Kerby backs up all of the images he takes using [Camera or drone] onto two external hard drives.
- He uses cell phone applications to share images with his colleagues immediately.

### Generally Speaking

- Everyone owns the copyright to images they take unless they sell them.
- **Photo owning:** is the legal right or copyright to publish or sell the photo.
- **Copyright infringement:** is using images taken by others without asking for permission or without purchasing them.
- To protect your work from being stolen add a watermark or copyright information, such as names.
- Mr. Kerby ensures his work is protected by sharing his high-resolution photos only with people he trusts, otherwise he shares low-resolution photos public because they won't look good if printed.
- **Reverse image searches:** is finding out if any of our photos are being used without permission.
- Copyright infringement is against the law, the Egyptian law supports the copyright protection.





### Summary

- 1- 'Jeff Kerby' he is an ecologist and a photographer, who worked on exciting photography expeditions.
- 2- **Exciting expeditions** are trips to places where you take photography of areas like [landscapes – animals].
- 3- Tools are Mr. Kerby like to use are [camera – camera lenses – camera batteries – laptop – hard drives – drones – phone with GPS mapping tools].
- 4- Cell phones can be used to share images with colleagues immediately.
- 5- Everyone own a copyright on his stuff unless he sold them.
- 6- **Photo owning** is the legal or copyright to publish or sell the photo.
- 7- **Copyright infringement** is using images taken by others without asking for permission or without purchasing them.
- 8- To protect your work, add a watermark on them.
- 9- **Reverse images searches** is finding out if any of your photo are being used without permission.

### Vocabulary

Ecologist	عالم بيئة	Photographer	مصور
Exciting	مثير	Expedition	رحلة استكشافية
Trip	رحلة	Landscapes	المناظر الطبيعية
Lenses	عدسات	Copyright	حقوق الملكية
Immediately	في الحال	Photo owning	ملكية الصور
Legal	قانوني	Publish	نشر
Copyright infringement	انتهاك حقوق الملكية	Infringement	انتهاك
Permission	إذن	Purchasing	شراء
Protect	حماية	Watermark	علامة مائية
Reverse images searches			عمليات البحث العكسي عن الصور



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- You can't know if someone is using your images on the internet. ( )
- 2- It's possible to know if someone is using your images on the internet. ( )
- 3- Everyone has the right to use your images freely without permission. ( )
- 4- Copyrights protects your work from being stolen. ( )
- 5- Copyrights mean that people can take your image and use it. ( )
- 6- You are the owner of pictures and images you get so no one has the right to use it. ( )
- 7- It's legal to publish images without owner permission. ( )
- 8- The legal right to copyright image is called photo owning. ( )
- 9- Using images taken by others without asking for permission is copyright infringement. ( )
- 10- Trips to places where you take photography are exciting expeditions. ( )

**Complete using words between brackets:**

[Photo owning – Copyright infringement – Reverse images searches – Exciting expeditions]

- 1- ..... are trips to places where you take photography of areas like [landscapes – animals].
- 2- ..... is finding out if any of your photo are being used without permission.
- 3- ..... is the legal or copyright to publish or sell the photo.
- 4- ..... is using images taken by others without asking for permission or without purchasing them.

**Choose the correct answer:**

- 1- Are trips to places where you take photography of areas like [landscapes – animals. (Photo owning – Copyright infringement – Reverse images searches – Exciting expeditions)
- 2- Is using images taken by others without asking for permission or without purchasing them. (Photo owning – Copyright infringement – Reverse images searches – Exciting expeditions)
- 3- Is finding out if any of your photo are being used without permission. (Photo owning – Copyright infringement – Reverse images searches – Exciting expeditions)
- 4- Is the legal or copyright to publish or sell the photo. (Photo owning – Copyright infringement – Reverse images searches – Exciting expeditions)

**Match from column (A) what match with column (B):**

1- Reverse images searches	A- is using images taken by others without asking for permission or without purchasing them.
2- Copyright infringement	B- is finding out if any of your photo are being used without permission.
3- Exciting expeditions	C- is the legal or copyright to publish or sell the photo.
4- Photo owning	D- are trips to places where you take photography of areas like [landscapes – animals].





## Protecting ourselves and our information

### Introduction

In this lesson student will learn the importance on personal information protection, backing up data, and how to protect your personal information and data.

### Into the lesson

#### Stolen data

**Hacker:** is someone who breaks into a computer system and steal personal information.

**Personally identifiable information (PII):** a personal information such as [name – address – date of birth – password].

- Hackers send a virus to email address or the hacked email address contacts, also they can use an adult's bank account to steal money from that account.

#### **How to keep you PII safe?**

- 1- Limit your personal information you share online.
- 2- Don't sign up for a website if it asks for too much personal information.
- 3- Use different strong passwords that contain [letters – numbers – symbols].
- 4- Use anti-virus software on all of your devices, and update your devices regularly.

**The updates:** are the changes that keep your data safe.

#### Lost files

Ofc. we need to protect our data from [viruses – software problems – or even human errors such as dropping or breaking your laptop].

#### **How to back up your data?**

- 1- Use software programs that do back up automatically.
- 2- Use a data-storage device such as [flash drive – external hard disk drive]

**Hybrid backup:** is backing up our data on data-storage devices and its safer way to backup and store files.

**External H.D.D:** one of the accessories that can save files securely, backup copies of files that are important and private to prevent losing them.

H.D.D is better than flash memory because it has more space.

## Summary

- 1- **Hacker** is someone who steal your data.
- 2- **PII** [Personally identifiable information]: is your personal information such as [name – address – date of birth – password].
- 3- Don't sign up for unknown website that ask for too much information.
- 4- Use strong passwords that contain [letters – numbers – symbols].
- 5- **Anti-virus** protects you from being a victim to bad software programs or hackers.
- 6- Keep your device updated for data safety.
- 7- Use software programs that help you to backup data automatically.
- 8- Don't forgot to back up your data on external drives to prevent data loss.

## Vocabulary

<b>Stolen data</b>	البيانات المسروقة	<b>Hacker</b>	المخترق
<b>Breaks into</b>	يقنحم – يخترق	<b>Steal</b>	يسرق
<b>Personal identifiable information</b>	معلومات التعريف الشخصية	<b>Virus</b>	برنامج ضار
<b>Sign up</b>	تسجيل	<b>Symbols</b>	رموز
<b>Anti-virus software</b>	برنامج حماية ضد البرامج الضارة	<b>Updates</b>	تحديثات
<b>Lost files</b>	ملفات مفقودة	<b>Human errors</b>	أخطاء بشرية
<b>Backup</b>	رفع الملفات	<b>Automatically</b>	تلقائياً
<b>Securely</b>	بأمان	<b>Prevent</b>	منع



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- No one can steal your data online. ( )
- 2- It's not important to keep backup of your data. ( )
- 3- You must keep backup of your data to prevent hackers or data loss. ( )
- 4- There is no program can protect you from virus. ( )
- 5- Anti-virus doesn't protect your device from bad programs. ( )
- 6- Anti-virus protect your device from bad programs or being hacked. ( )
- 7- PII is your personal information, so you must protect them. ( )
- 8- Updates help your computer to stay safe. ( )
- 9- Update make you more insecure and could be hacked. ( )
- 10- Hacker is a trusted person to give him your data and personal information. ( )
- 11- There is no way to save your data. ( )

**Complete using words between brackets:****[Hacker – Updates – PII – Anti-virus – External H.D.D – Hybrid backup]**

- 1- ..... one of the accessories that can save files securely, backup copies of files that are important and private to prevent losing them.
- 2- ..... is your personal information.
- 3- ..... is someone who steal your data.
- 4- ..... are the changes that keep your data safe.
- 5- ..... is backing up our data on data-storage devices and its safer way to backup and store files.
- 6- ..... protects you from being a victim to bad software programs or hackers.

**Choose the correct answer:**

- 1- Is your personal information such as [name – address]. (Updates – PII – Backup – Hacker)
- 2- Is someone who steal your data. (Updates – PII – Backup – Hacker)
- 3- Are the changes that keep your data safe. (Updates – PII – Backup – Anti-virus)
- 4- Protects you from being a victim to bad software programs or hackers. (Updates – Anti-virus – Backup – Hacker)

**Match from column (A) what match with column (B):**

1- Hacker	A- one of the accessories that can save files securely, backup copies of files that are important and private to prevent losing them.
2- Updates	B- is your personal information.
3- Anti-virus	C- is someone who steal your data.
4- PII	D- are the changes that keep your data safe.
5- Hybrid backup	E- is backing up our data on data-storage devices and its safer way to backup and store files.
6- External H.D.D	F- protects you from being a victim to bad software programs or hackers.

## Password security

### Introduction

In this lesson student will understand the importance of password protection, what is the purpose of a password manager, and how to use multi-factor authentication to protect your data and accounts.

### Into the lesson

- Hackers have many ways to get your password.
- **Phishing:** is sending a message via e-mail or social media applications that look real.
- **Scam:** is a message which says that you have won a prize, but you must give your bank account details.
- **Smishing:** is a text message instead of an email.
- When an attachment or file is opened, data-stealing software is installed on your computer or it ask you to enter sensitive information like bank account.

### How to identify this scam message?

This message contains misspelled words, grammar errors, or requests for too much personal information

### Password manager

**Password manager:** creating strong password as a unique password for each of your account, also it tells you if the password is weak or you've used this password before, it also can tell you if your password has been stolen online.

### Multi-factor authentication

**Multi-Factor Identification (MFA):** Means you provide at least two ways of identifying yourself, it combines a known factor [password – PIN (personal identification number)].

This factor can be email or one-time code.

The best method is mobile authentication, so if someone hacked your email address, he will need the mobile to get the code has been sent.

### Summary

- 1- You must use strong passwords to prevent hackers from guessing your passwords.
- 2- **Password manager** can help you creating strong passwords, and telling you if this password has been used or stolen online.
- 3- **Phishing** is sending a fake message via e-mail or social media applications.
- 4- **Scam** is a message which says that you have won a prize, but you must give your bank account details.



5- **Smishing** is a phone text message instead of an email.

6- Use **MFA (Multi-Factor authentication)** for your safety online.

### Vocabulary

Phishing	التصيد	Scam	الاحتيال
Smishing	الاحتيال	Attachment	مرفق
Sensitive	حساس	Misspelled	خطأ إملائي
Unique	فريد	Multi-factor authentication	مصادقة متعددة العوامل
Combine	مزيج من	Identification	تعريف

**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- Scammer can send you message using e-mail or social media application. ( )
- 2- Scamming is sending fake message using social media. ( )
- 3- Smishing is sending phone messages to hack your device. ( )
- 4- There is no way to secure yourself from being hacked. ( )
- 5- MFA is the best way to protect your data from being stolen. ( )
- 6- Password manager can help you to get strong password. ( )
- 7- You can't protect your passwords or even know if they are being used. ( )
- 8- Messages which contain misspelled words, grammar errors are scam messages. ( )
- 9- The best password is combined using [letters – numbers – symbols]. ( )

**Complete using words between brackets:****[Smishing – Scam – Phishing – Multi-Factor Identification (MFA) – Password manager]**

- 1- ..... means you provide at least two ways of identifying yourself, it combines a known factor [password – PIN].
- 2- ..... is a message which says that you have won a prize, but you must give your bank account details.
- 3- ..... is a phone text message instead of an email.
- 4- ..... is sending a fake message via e-mail or social media applications.
- 5- ..... can help you creating strong passwords, and telling you if this password has been used or stolen online.

**Choose the correct answer:**

- 1- Phone text message instead of an email. (Smishing – Scam – Phishing – Password manager)
- 2- Sending a fake message via e-mail or social media applications. (Smishing – Scam – Phishing – Password manager)
- 3- Message which says that you have won a prize, but you must give your bank account details. (Smishing – Scam – Phishing – Password manager)
- 4- can help you creating strong passwords, and telling you if this password has been used or stolen online. (Smishing – Scam – Phishing – Password manager)

**Match from column (A) what match with column (B):**

1- Smishing	A- means you provide at least two ways of identifying yourself, it combines a known factor [password – PIN].
2- Scam	B- is a message which says that you have won a prize, but you must give your bank account details.
3- Password manager	C- is sending a fake message via e-mail or social media applications.
4- Multi-Factor Identification (MFA)	D- is a phone text message instead of an email.
5- Phishing	E- can help you creating strong passwords, and telling you if this password has been used or stolen online.



## How to deal with fake websites

### Introduction

In this lesson student will know what are the scam websites and how to avoid them, also student will know to whom should he report problems with websites.

### Into the lesson

**Going online:** is visiting new websites and interacting with new people, so you should be careful in these situations as you would in any new environment.

**Scam websites:** a website with a notice popped up saying you won something, but all you need to do is paying for the shipment.

**Phishing websites:** a website that present fake situations that try to get your information while including online shopping sites that never send you items you bought.

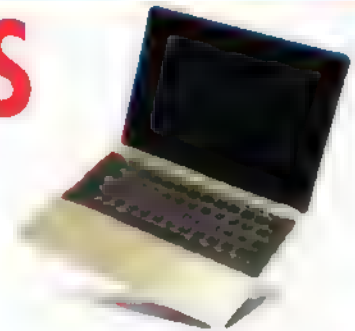
**Scareware websites:** a website that say your computer has a problem and you need to download a program to fix it.

# CONGRATULATIONS

You just won a free laptop!!!

All you have to do is pay for the shipping.

Click here to provide your credit card information



### How scam websites operate?

- 1- They try and bait you by making you getting excited or getting your attention to the site.
- 2- Compromise your privacy by getting your personal information or by accessing your device.
- 3- They exploit the information that gained about you in a bad way.

### How to avoid scam websites?

- 1- Check the URL (Uniform Resource Locator) of the website is credible, its basically the address of website.
- 2- Check for misspelling or bad grammar, because reliable source will be well-written with no mistakes.
- 3- Search online to see if it's a known scam, or if something doesn't look right then it's a scam.

- If you became a victim of a scam website, report it by telling trusted adult so he can take an action, also you can contact the Child helpline or The General Department of Combating Internet Crimes.
- Report the scam website to your ISP and your bank.

### Summary

- 1- Be careful when you visit new website or interact with new people.
- 2- **Scam websites** had notice popped up saying you won something and ask you to pay for shipment.
- 3- **Phishing websites** present fake situations to steal your personal information.
- 4- **Scareware websites** website says your computer has a problem and you need to download a software to fix this problem, it's a malware.
- 5- **Scam website** trying to make you getting excited or getting your attention to steal your information or exploit it in a bad way.
- 6- To avoid scam websites you must check the URL and make sure it's a reliable website.
- 7- Report bad websites to your ISP or child helpline or The General Department of Combating Internet Crimes.
- 8- **Exploit** means using your information in bad way.

### Vocabulary

Interact	تفاعل	Environment	بيئة
Notice	يلاحظ	Pop up	يظهر فجأة
Shipment	مصاريف الشحن	Fake	مزيف
Scareware	الفرع	Operate	يعمل
Excited	إثارة	Attention	الانتباه
Exploit	استثمار	Credible	معقول
Misspelling	خطأ إملائي	Reliable	موثوق



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- All websites are trusted and don't contain bad software. ( )
- 2- Be aware while surfing the internet because there are websites that can hack you. ( )
- 3- There are fake sites that can steal your bank account. ( )
- 4- Websites that contain free prizes are trusted and real. ( )
- 5- You can be reckless while visiting websites on the internet. ( )
- 6- There are websites ask you for personal data called scareware websites. ( )
- 7- Exploiting is using your information in bad way. ( )
- 8- Scam websites are trusted and contain real information. ( )
- 9- Scam websites pop up notice screen that say you won something. ( )

**Complete using words between brackets:****[Scareware websites – Phishing websites – Scam websites – Exploit – Going online]**

- 1- ..... had notice popped up saying you won something and ask you to pay for shipment.
- 2- ..... is visiting new websites and interacting with new people, so you should be careful in these situations as you would in any new environment.
- 3- ..... website says your computer has a problem and you need to download a software to fix this problem, it's a malware.
- 4- ..... means using your information in bad way.
- 5- ..... present fake situations to steal your personal information.

**Choose the correct answer:**

- 1- Present fake situations to steal your personal information. (Phishing websites – Scam websites – Exploit – Going online)
- 2- Means using your information in bad way. (Phishing websites – Scam websites – Exploit – Going online)
- 3- Had notice popped up saying you won something and ask you to pay for shipment. (Phishing websites – Scam websites – Exploit – Going online)
- 4- website says your computer has a problem and you need to download a software to fix this problem, it's a malware. (Phishing websites – Scam websites – Scareware websites – Going online)

**Match from column (A) what match with column (B):**

1- Scareware websites	A- had notice popped up saying you won something and ask you to pay for shipment.
2- Exploit	B- is visiting new websites and interacting with new people, so you should be careful in these situations as you would in any new environment.
3- Phishing websites	C- website says your computer has a problem and you need to download a software to fix this problem, it's a malware.
4- Scam websites	D- means using your information in bad way.
5- Going online	E- present fake situations to steal your personal information.

## Intellectual property rights

### Introduction

In this lesson student will know the law while using information, devices, and networks, also he will be able to identify that to need to attribute a creator's work.

### Into the lesson

**Online content:** can be used if you're going to use it into your school report by copy and paste it.

- Copyright law protects print and digital content.
- Copyright gives creators legal protection for the things they create.

**Copyright** has international symbol [©].

Copyright laws cover many creations such as [books – images – music – movies – games – computer software – and websites].

**Website copyright:** could be found at the bottom of the home page.

- You must respect the creator's work and use it fairly by asking for permission and attribute it [giving credit] to the creator.

**What are the sources that not covered by copyright?**

Sometimes the owner gives free permission of his item to be reused on the internet at any time and any place, so we can use it freely.

**Creative common:** owner gives permission to reuse his work at any time and any place freely.

### Things not covered by

1- Works in the public domain.	2- Facts.	3- Discoveries.
4- Official documents such as laws.	5- Creative works whose owner has been dead for 50 years.	6- Creative common work.

### Writing content

While writing a content use small part of someone else's writing in a research paper, few words or sentences.

You can use the exact words without change, or rewrite them into paraphrase ideas in your own style.

- In both cases, you must mention the name of the writers.

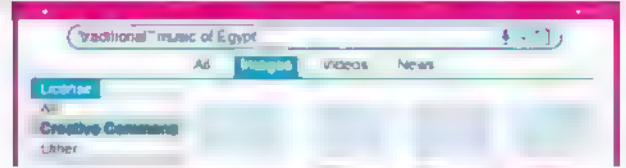
### Images

Images are protected by copyright, including [title – photographer's name – original link for the image].

If you don't want to get permission or buy images, you can make or take your own images instead.

### Public domain and Creative commons

**Creative common:** means the creator has given permission for their work to be used at any time, so while searching for an image you can use show only creative common images.



**Public domain:** includes all creative works not covered by copyright law.

In Egypt, creative works normally enter the public domain after 50 years of owner death.

### Summary

- 1- Copyright laws protect print and digital content, and give creators legal protection for their stuff.
- 2- Copyright covers [books – images – music – games – computer software – websites].
- 3- **Website copyright** could be found at the bottom of the home page.
- 4- You must respect the creators by giving credit and don't use their items without permission.
- 5- Things that not covered by copyright [public domains – facts – discoveries – official document such as laws – creative works whose owner dead after 50 years – creative common work].
- 6- **Creative common** means the creator give free permission to use his item.
- 7- **Public domain** includes all creative works not covered by copyright law.
- 8- Copyright symbol is [©].

### Vocabulary

Content	محتوى	Copyright	حقوق النشر
Respect	يحترم	Attribute	ينسب
Creative common	إبداعية مشتركة	Permission	إذن
Reuse	إعادة استخدام	Freely	بحرية
Public domain	المجال العام	Facts	الحقائق
Discoveries	الاكتشافات	Official document	الوثائق الرسمية
Writing content	كتابة محتوى	Paraphrase	شرح النص



## Revision

Put (✓) to the correct statement and (✗) to the wrong statement:

- 1- Owner can give free permission to use his work if he want. ( )
- 2- You must give credit to the creator and that's called respect. ( )
- 3- While reforming the content don't forgot the creator attribute. ( )
- 4- You can reform the content and don't mention the creator because he isn't important. ( )
- 5- Things are free to use called creative common. ( )
- 6- Public domain include everything for free. ( )
- 7- Private domains include everything for free. ( )
- 8- Paraphrase mean reforming content and own it for yourself. ( )
- 9- Law document considered to be freely use document. ( )
- 10- Law documents aren't free to use because you need permission first. ( )
- 11- There is no copyright inside website contents and websites can't be protected. ( )

Complete using words between brackets:

[Public domain – Creative common – Website copyright - Online content – Paraphrase]

- 1- ..... can be used if you're going to use it into your school report by copy and paste it.
- 2- ..... it means reform the creator ideas using your own way while respecting the owner by giving credit.
- 3- ..... means the creator has given permission for their work to be used at any time.
- 4- ..... could be found at the bottom of the home page.
- 5- ..... includes all creative works not covered by copyright law.

Choose the correct answer:

- 1- Means the creator has given permission for their work to be used at any time. (Public domain – Creative common – Website copyright - Online content)
- 2- Could be found at the bottom of the home page. (Public domain – Creative common – Website copyright - Online content)
- 3- Includes all creative works not covered by copyright law. Public domain – Creative common – Website copyright - Online content)
- 4- It means reform the creator ideas using your own way while respecting the owner by giving credit. (Public domain – Creative common – Paraphrase - Online content)

Match from column (A) what match with column (B):

1- Public domain	A- can be used if you're going to use it into your school report by copy and paste it.
2- Creative common	B- It means reform the creator ideas using your own way while respecting the owner by giving credit.
3- Website copyright	C- means the creator has given permission for their work to be used at any time.
4- Online content	D- could be found at the bottom of the home page.
5- Paraphrase	E- includes all creative works not covered by copyright law.

## Using digital sources

### Introduction

In this lesson student will learn how to use ICT tools and sources to support decision-making processes, and the difference between opinions and facts, and how to explain the different kinds of sources to be used to conduct online research.

### Into the lesson

#### How to use digital sources?

- 1- Think about identifying reliable digital sources that enable you to accomplish your research tasks.
- 2- You can go to the site you want by typing the URL in the search engine, or ask family member to help you while browsing a site for the first time.
- 3- Reliable digital sites could be recommended by your teacher or school such as [EKB].

#### What is the difference between fact and opinion?

**Facts:** come from research and observation, they are statements that can be proven.

- Facts can't be debated and are true.

**Opinions:** based on someone's views and experiences, they can't be proven.

- Opinions can be debated and are not true.
- Using multiple sources in your researches is a good decision that helps make sure you know all the important facts about a topic.
- It's OK if you can find same information in two reliable websites.

Sources other than text in online articles and encyclopedias may include important information. If you need facts that can be measured, maps, graphs, infographics, and charts will be useful. Pictures and videos can also be reliable sources.

Sources can help us acquire information better through watching than just reading words.

- Archives and database can be reliable sources.

#### What are the research materials?

There are many types of materials [books – articles – diaries – letters – photographs].

- EKB (Egyptian knowledge bank) is an example of an archive.

### Summary

- 1- First you must think about identifying reliable digital sources that will help you to accomplish your research tasks.
- 2- Go to a website using URL in a search engine.
- 3- **Facts** are statements come from research and observation, that can be proven, can't be debated and are true.
- 4- **Opinions** based on someone's views and experiences, they can't be proven, can be debated and are not true.
- 5- We must use multiple sources to make sure about important facts about a topic.
- 6- Sources can help us acquire information better through watching than just reading words.
- 7- Archives and databases are reliable sources.
- 8- Research materials are [books – articles – diaries – letters – photographs].

### Vocabulary

Reliable	موثوق	Accomplish	يحقق
Search engine	محرك البحث	Facts	حقائق
Difference	اختلاف	Opinions	آراء
Observation	ملاحظة	Proven	مثبت
Debated	مناقشة	Multiple	متعدد
Articles	مقالات	Encyclopedias	الموسوعات
Acquire	يستحوذ على	Materials	خامات
Archive	أرشيف	Database	قاعدة البيانات



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- To start research first think on a reliable source that will help you. ( )
- 2- All sources you may found are not trusted. ( )
- 3- Facts statements come from research and observation. ( )
- 4- Facts can be proven, can't be debated and are true. ( )
- 5- Facts can't be proven, can be debated and are not true. ( )
- 6- Opinions based on someone's views and experiences. ( )
- 7- Opinions can't be proven, can be debated and are not true. ( )
- 8- Opinions can be proven, can't be debated and are true. ( )
- 9- It's important to use multiple sources to make sure about important facts. ( )
- 10- Using multiple sources doesn't really matter because information is full of lies. ( )
- 11- Archives and databases are reliable sources. ( )
- 12- Archives and databases are not reliable sources. ( )

**Complete using words between brackets:****[Facts – Sources – Opinions – Research materials – Archive and database]**

- 1- ..... Considered to be reliable sources.
- 2- ..... are statements come from research and observation, that can be proven.
- 3- ..... can help us acquire information better through watching than just reading words.
- 4- ..... based on someone's views and experiences, they can't be proven.
- 5- ..... they are too many such as [books – articles – diaries – letters – photographs].

**Choose the correct answer:**

- 1- can help us acquire information better through watching than just reading words. (Archive – Sources – Materials - Opinions)
- 2- Considered to be reliable sources. (Archive – Facts – Materials - Opinions)
- 3- Statements come from research and observation, that can be proven. (Archive – Facts – Materials - Opinions)
- 4- Based on someone's views and experiences, they can't be proven. (Archive – Facts – Materials - Opinions)
- 5- They are too many such as [books – articles – diaries – letters – photographs]. (Archive – Facts – Materials - Opinions)

**Match from column (A) what match with column (B):**

1- Facts	A- Considered to be reliable sources.
2- Archive and database	B- based on someone's views and experiences, they can't be proven.
3- Research materials	C- are statements come from research and observation, that can be proven.
4- Opinions	D- can help us acquire information better through watching than just reading words
5- Sources	E- they are too many such as [books – articles – diaries – letters – photographs].

## Advanced searches

### Introduction

In this lesson student will learn how to choose specific and accurate online search terms, how to use search engines and advanced searching tools, and how to let online sources meet the search needs.

### Into the lesson

To get a specific search result you must start with a specific topic and research questions.

**Keywords:** are a specific word used for research to get a better result of a topic.

**Synonyms:** are words being used to make the search terms more accurate.

- To get only the exact result put the terms in quotation marks [""].
- Some of search engines suggest keywords or similar searches.

**Advanced searching tool:** helps you limit search results.

- You can use advanced searching tool to [combine – exclude] keywords or limit the results to specific domains such as [.edu - .gov].

### Boolean operators and search modifiers

<b>AND:</b> results will include both terms. Ex. [video games and teenagers].	<b>"":</b> results will include the exact terms. Ex. "video games".	<b>OR:</b> results will include either term. Ex. child or teenager.
<b>():</b> results prioritize what is in parentheses. Ex. (video games) teenagers.	<b>NOT:</b> results will not include the terms. Ex. video games not online.	<b>*</b> : results will include all forms of a word. Ex. teen*.

### Search results

Scan the summary for each result, look for titles connected to your topics and keywords.

Scan for facts that answer your research questions.

Click on each possible source and skim the content.

Look for [titles – headers – keywords] that match your research topic and questions, and choose the best sources with the best match.

### Summary

- 1- **Keywords** are words used for research to get better result.
- 2- **Synonyms** words being used to make the search term more accurate.
- 3- Some of search engines suggest keywords or similar searches.
- 4- **Advanced searching tool** helps you limit your search results.
- 5- You can use advanced tool to [combine – exclude] keywords or limit the result.
- 6- You can use operators and search modifiers such as:
  - **AND** include both terms.
  - **OR** include either term.
  - **NOT** exclude the terms.
  - **""** include the exact terms.
  - **()** prioritize the terms.
  - **\*** include all forms of a word.
- 7- Scan for facts that answer your questions and click on each possible source and skim the content.
- 8- Choose the best source that match your research topic and questions.

### Vocabulary

Keyword	كلمة دلالية	Synonyms	المرادفات
Quotation mark	علامة تنصيص	Suggest	يقترح
Include	يتضمن	Exclude	لا يتضمن
Operators	عمليات	Skim	تصفح
Prioritize	أولوية	Forms	أشكال



**Revision****Put (✓) to the correct statement and (✗) to the wrong statement:**

- 1- To include both terms, you need to type NOT inside the search engine. ( )
- 2- To include both terms, you need to type ADD inside the search engine. ( )
- 3- To exclude terms, you need to type ADD inside the search engine. ( )
- 4- To exclude terms, you need to type NOT inside the search engine. ( )
- 5- To include the exact terms, you need to type "" inside the search engine. ( )
- 6- To include either term, you need to type "" inside the search engine. ( )
- 7- To include either terms, you need to type OR inside the search engine. ( )
- 8- Keyword is a specific word used for research to get a better result of a topic. ( )
- 9- Synonyms are words being used to make the search terms more accurate. ( )
- 10- Keywords are words being used to make the search terms more accurate. ( )
- 11- Synonyms is a specific word used for research to get a better result of a topic. ( )

**Complete using words between brackets:****[Synonyms – Keywords – Advanced searching tool – Quotation mark]**

- 1- ..... specific word used for research to get a better result of a topic.
- 2- ..... are words being used to make the search terms more accurate.
- 3- To get only the exact result put the terms in .....
- 4- ..... helps you limit your search results.

**Choose the correct answer:**

- 1- are words being used to make the search terms more accurate. (Keywords – Synonyms – Quotation mark – Formula)
- 2- specific word used for research to get a better result of a topic. (Keywords – Synonyms – Quotation mark – Formula)
- 3- helps you limit your search results. (Keywords – Synonyms – Quotation mark – Advanced searching tool)
- 4- To get only the exact result put the terms in. (Keywords – Synonyms – Quotation mark – Advanced searching tool)

**Match from column (A) what match with column (B):**

1- Advanced searching tool	A- To get only the exact result put the terms in.
2- Keywords	B- are words being used to make the search terms more accurate.
3- Quotation mark	C- specific word used for research to get a better result of a topic.
4- Synonyms	D- helps you limit your search results.

## Documenting information appropriately

### Introduction

In this lesson student will learn how to take notes and paraphrase online content, the reasons for quoting online content and how to do it, also how to cite online sources.

### Into the lesson

**Taking notes:** a research paper is written in your own words, it's easier if you start notes for each source.

**How to take a note?** Add the URL and the author's name at the top of notes.

**Paraphrasing:** Using own words to explain the ideas of the author, while changing some of vocabulary words, also ordering the ideas and the sentence structure.

**Paraphrasing** means you are showing respect for the author's work.

**Quotes:** support ideas and arguments by stating where the quote from and why you are using it.

In the article _____ (article title) _____ it said ...	This shows that ...
According to _____ (author's name) ...	This proves that ...
_____ (author's name) states ...	This illustrates ...

**Citing sources:** At the end of a research report, you list your sources on a Works Cited page. Because websites change, some online sources include a permalink to use as the cited web address. This is a permanent hyperlink, a highlighted word or picture you click on to take you to another web location. Look for a "share" or "cite this" button to find the permalink. You can ask your teacher for help to view one of these hyperlinks.

**What are the methods to be considered while citing a source?**

1- Put the citations in alphabetical order by [author's last name – title of the article]

2- Give [source – date – URL].

- Egypt beach resorts fight global scourge of plastic trash. (2019, December 21). Arab News. Retrieved August 12, 2022, <https://arab.news/pwhre>.

3- The YouTube video uploader is the author, date, video title.

- RTV, 2019. Very Nile video. YouTube, [https://www.youtube.com/watch?v=yH5SVlgN\\_gY](https://www.youtube.com/watch?v=yH5SVlgN_gY).



### Summary

- 1- You must take notes to make it easier for each source.
- 2- To take a note add [URL – Author name].
- 3- **Paraphrasing** is using own words to explain author ideas, while changing some of vocabulary words or ordering the ideas and the sentence structure.
- 4- **Quotes** supports ideas and arguments by stating where the quote came from.
- 5- **Citing sources:** means listing your sources, and there are methods to be considered while citing sources such as put source in order by [author's last name – title of the article if author is unknown].
- 6- **Citing** must be alphabetical order.
- 7- Give the [source – date – URL].
- 8- For YouTube the uploader is the author.

### Vocabulary

Notes	ملاحظات	Author	مؤلف
Paraphrasing	إعادة صياغة	Vocabulary	كلمات
Order	ترتيب	Structure	هيكل
Quote	يقتبس	Citing	نقلا عن
Citations	اقتباسات	Alphabetical	ترتيب أبجدي



## Revision

Put (✓) to the correct statement and (✗) to the wrong statement:

- |   |         |
|---|---------|
| 1- It's not important to take notes of your sources.                        | (     ) |
| 2- You can write your notes without add the URL or the author's name.       | (     ) |
| 3- You have the right to quote any statement without asking for permission. | (     ) |
| 4- Paraphrasing is using own words to explain author's ideas.               | (     ) |
| 5- Quotes support ideas and argument by stating where it came from.         | (     ) |
| 6- It doesn't matter to cite notes in alphabetical order.                   | (     ) |
| 7- It does matter to cite notes in alphabetical order.                      | (     ) |
| 8- Paraphrasing is using words to explain your ideas.                       | (     ) |
| 9- It's not important to give source, date, or URL.                         | (     ) |
| 10- The YouTube uploader could be considered as an author.                  | (     ) |
| 11- Paraphrasing means you respect the author.                              | (     ) |

Complete using words between brackets:

[Paraphrasing – Citing sources – Quotes – Taking note]

- 1- ..... supports ideas and arguments by stating where they came from.
- 2- ..... is using own words to explain author ideas.
- 3- ..... is listing your sources.
- 4- ..... is a research paper is written in your own words.

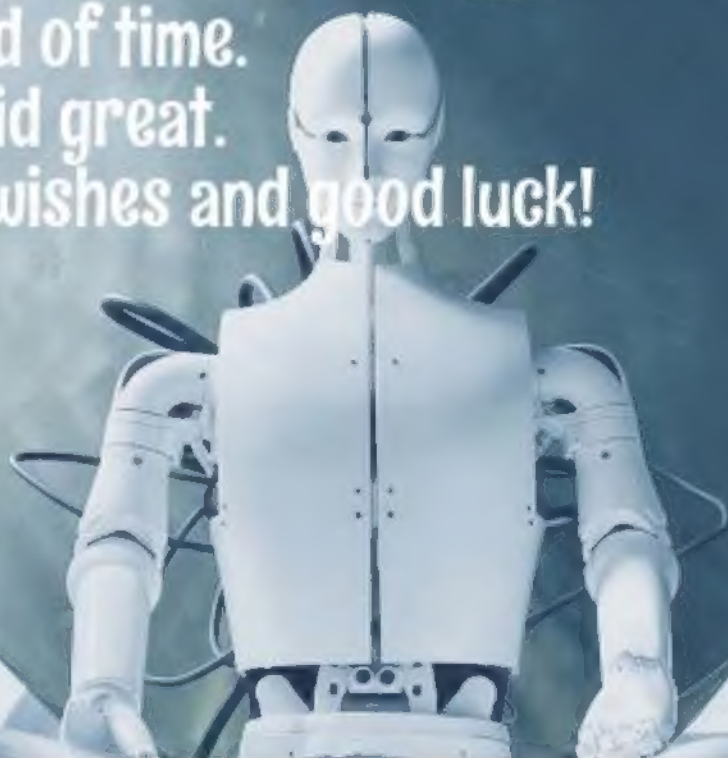
Choose the correct answer:

- |  |  |
|--|--|
| 1- supports ideas and arguments by stating where they came from. | (Citing – Quotes – Paraphrasing – Taking note) |
| 2- is listing your sources.                                      | (Citing – Quotes – Paraphrasing – Taking note) |
| 3- is a research paper is written in your own words.             | (Citing – Quotes – Paraphrasing – Taking note) |
| 4- is using own words to explain author ideas.                   | (Citing – Quotes – Paraphrasing – Taking note) |

Match from column (A) what match with column (B):

1- Quotes	A- is listing your sources
2- Paraphrasing	B- is a research paper is written in your own words.
3- Citing sources	C- supports ideas and arguments by stating where they came from.
4- Taking note	D- is using own words to explain author ideas.

Thank you for being my  
precious student for this  
period of time.  
You did great.  
Best wishes and good luck!



Mr. Ahmed Baltak  
[01003101184 -  
01507347734]